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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,605	05/29/2001	Stephen E. Richardson	10013854-1	4135

7590 04/16/2004

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

MOAZZAMI, NASSER G

ART UNIT	PAPER NUMBER
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2187

DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/865,605

Applicant(s)

RICHARDSON ET AL.

Examiner

Nasser G Moazzami

Art Unit

2187

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The Information Disclosure Statement submitted by applicant on 08/29/2001 has been considered. Please see attached PTO-1449.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant admitted Prior Art, hereinafter AAPA.

As per claim 1, AAPA teaches a multiprocessing system comprising: multiple processors mounted on a single die [**chip multiprocessor 295 includes multiple processors 210-240 on a single die 290 (see page 2, lines 2-3)**]; and multiple operating systems residing in a memory connected to said multiple processors, wherein each of said multiple processors executes an operating system of said multiple

operating systems [**multiple processors executing multiple operating systems (page 2, lines 18-19)**].

As per claim 2, AAPA discloses that said processors are operable to execute two or more of said multiple operating systems simultaneously [**Bugnion discloses that multiple operating systems can run simultaneously (see Bugnion, column 5, lines 62-63)**].

As per claim 3, AAPA discloses that said multiple processors are connected to said memory via a bus to execute said multiple operating systems [**see Fig. 2 of AAPA**].

As per claim 4, AAPA discloses that said multiple processors are directly connected to said memory to execute said multiple operating systems [**see Fig. 1 of AAPA**].

As per claim 5, AAPA discloses that each of said processors executes a distinct operating system of said multiple operating systems [**running different operating systems, wherein each virtual machine is configured with the resources that the operating system can handle (see Bugnion, column 4, lines 46-48)**].

As per claim 6, AAPA discloses that the system further comprising multiple processor groups, wherein each processor group includes at least two of said multiple processors executing one of said multiple operating systems **[some virtual machines can run commodity uniprocessor or multiprocessor operating systems (see Bugnion, column 4, lines 32-33)]**.

As per claims 7-20, claims 7-20 encompass the same scope of the invention as those of claims 1-6 in addition of some units and means for performing the above said functions as being stated above with respect to claims 1-6. Therefore, claims 7-20 are rejected for the same reasons as stated above with respect to claims 1-6.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,658,591 (Arndt)

U.S. Patent No. 6,314,501 (Gulick et al.)

U.S. Patent No. 5,446,841 (Kitano et al.)

U.S. Patent No. 5,301,324 (Dewey et al.)

U.S. Patent No. 5,201,040 (Wada et al.)

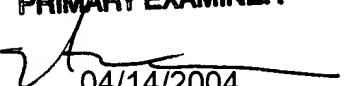
U.S. Patent No. 4,709,325 (Yajima)

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nasser G Moazzami whose telephone number is (703) 305-0017. The examiner can normally be reached on 7:00AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (703) 308-1756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NASSER MOAZZAMI
PRIMARY EXAMINER


04/14/2004